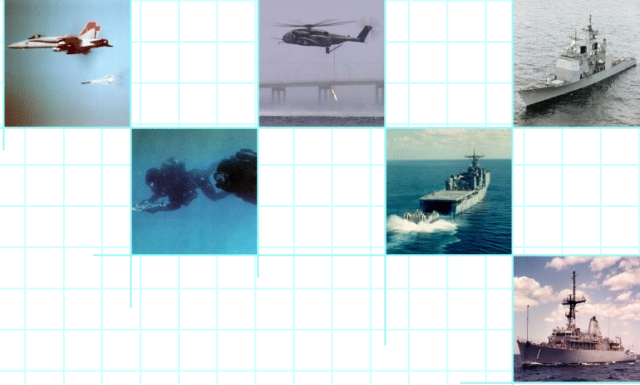
Naval Sea Systems Command

Coastal Systems Station

The leader in littoral warfare



Firefighter Ladder Safety System (LSS)
and Firefighter Extraction System (FES)
Shipl tion

DAHLGREN DIVISION
NAVAL SURFACE WARFARE CENTER

Firefighter Ladder Safety System (LSS)

PURPOSE

The Firefighter LSS has been implemented to resolve the Fleet's safety concerns regarding machinery space escape trunk re-entry for:

- Vertical entry firefighting
- Escape trunk training exercises

Firefighter Ladder Safety System (LSS)

The LSS can be used in conjunction with existing firefighting protection equipment, such as the:

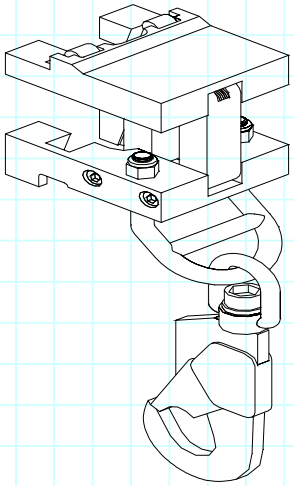
- Self-Contained Breathing Apparatus (SCBA)
- Oxygen Breathing Apparatus (OBA)
- Firefighting Ensemble (FFE)

Firefighter Ladder Safety System (LSS)

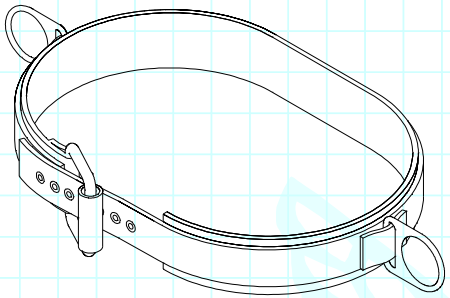
DESCRIPTION

Major components of the LSS include:

carrier sleeve



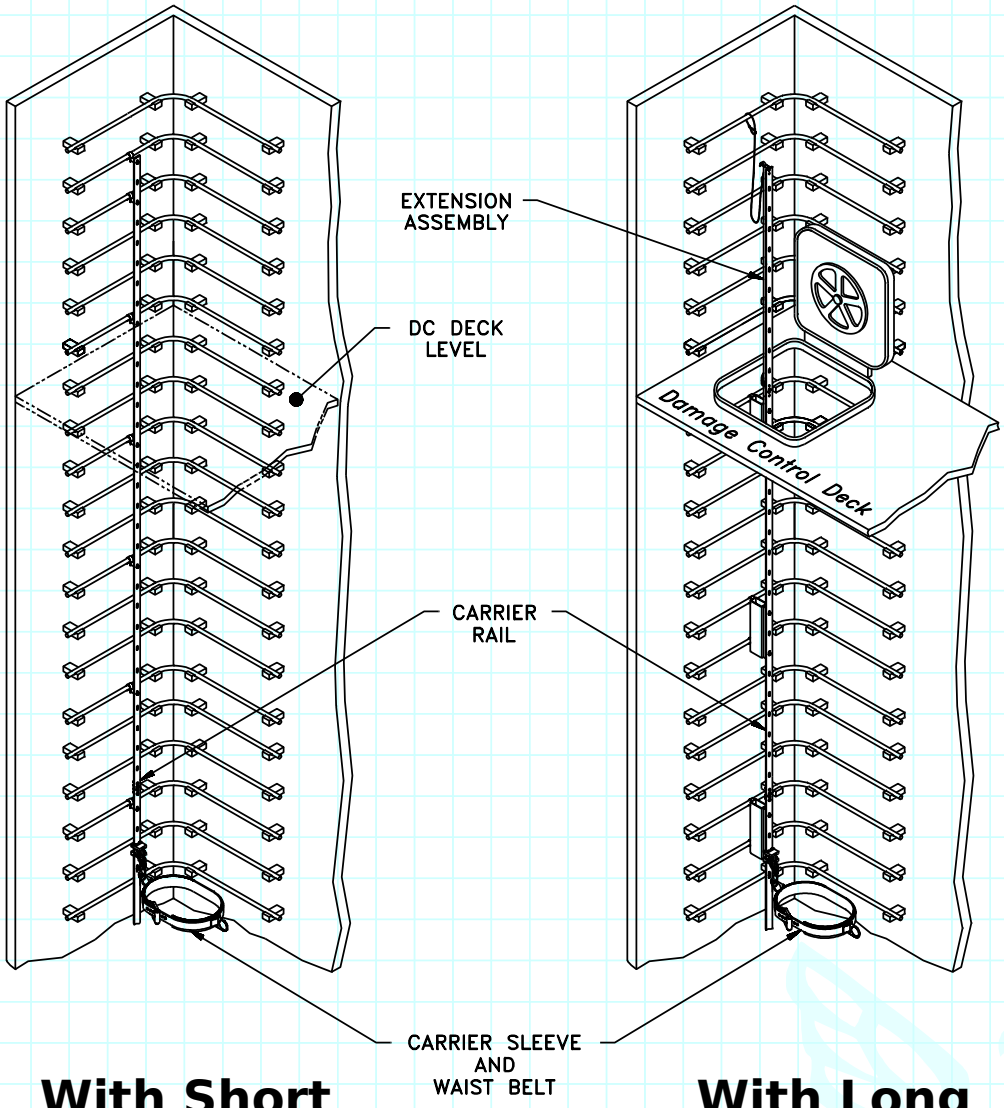
waist harness



ladder rail

Firefighter Ladder Safety System (LSS)

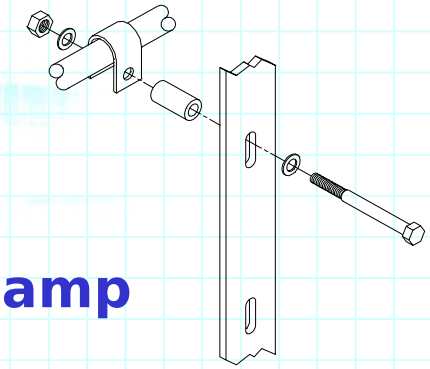
The LSS can be configured to accommodate protrusions, such as hatches.



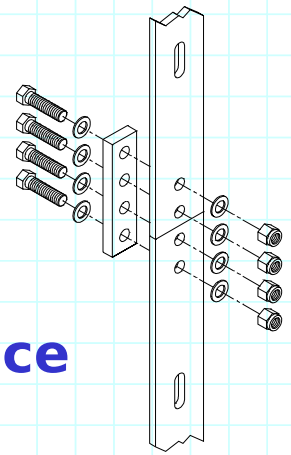
Firefighter Ladder Safety System (LSS)

INSTALLATION

- Carrier rail is bolted to escape trunk ladder rungs by a series of clamps and splices.



clamp



splice

- Typical installation time is one week.
- Installation time may vary due to differences in escape trunk configurations.

Firefighter Extraction System (FES)

PURPOSE

The FES provides rescue-lifting capability to remove injured or exhausted firefighters from the bottom

Firefighter Extraction System (FES)

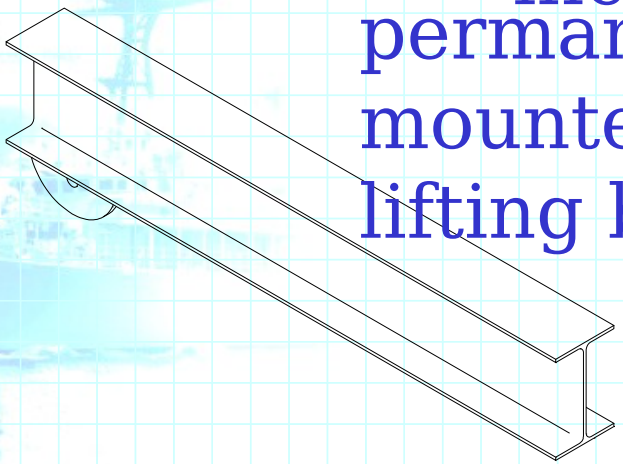
The FES is manually operated by the ship's force and does not require additional power sources.

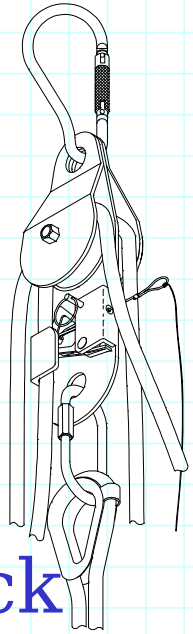
Firefighter Extraction System (FES)

DESCRIPTION

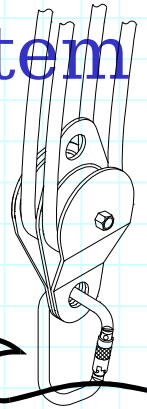
Major components of the FES include:

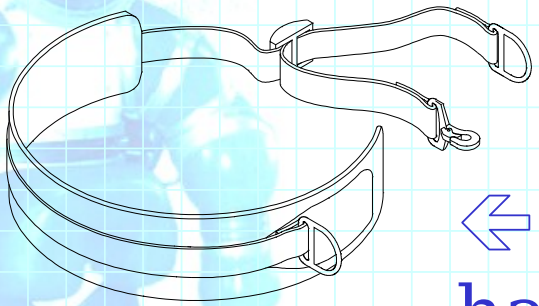
permanently mounted ⇩ lifting beam





rope block and tackle system





⇦ chest harness

Firefighter Extraction System (FES)

The FES will accommodate firefighters that are fully dressed in fire protection gear.

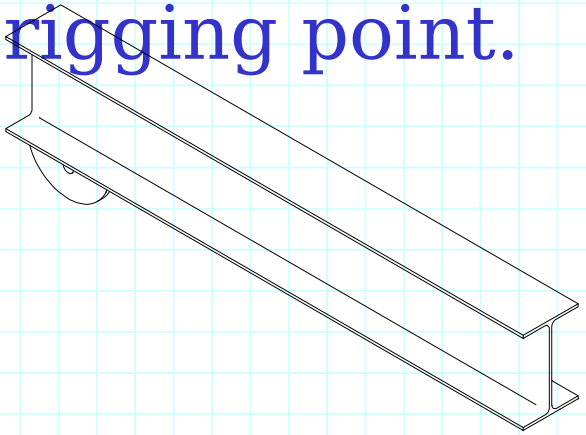
With OBA

With SCBA

Firefighter Extraction System (FES)

INSTALLATION

- The FES requires the installation of an I-beam that will serve as the system's rigging point.



- The I-beam will be permanently welded to the upper bulkhead of the escape trunk.
- The typical installation time is 1-1/2 weeks.

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